Claims

What is claimed is:

1. An assembled frame constructed from a generally flat blank, said frame comprising:

(a) at least two jack panels;

(b) at least three ribs, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and

(c) a first edge panel and a second edge panel defined on a first end and a second end, respectively, of said frame.

2. The assembled frame of claim 1, wherein said folding lock assemblies comprise wing tabs to secure said ribs into place.

3. The assembled frame of claim 1, comprising two jack panels and four ribs.

4. A force resisting corrugated assembly foldably constructed from a generally flat blank, the blank having top and bottom ends and sides upon folding, said assembly comprising:

(a) a first frame, said first frame comprising at least two jack panels; at least three ribs, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and first and second edge panels defined on first and second ends, respectively, of said first frame; and

(b) a second frame, said second frame comprising at least two jack panels; at least three ribs, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and first and second edge panels defined on first and second ends, respectively, of said second frame;

wherein said ribs of first and second frames comprise locking slots;

wherein said first and second frames are brought together in a perpendicular fashion such that the ribs of the first frame lock into place with the ribs of the second frame.

5. The corrugated assembly of claim 4, wherein said edge panels of said first and second frames are folded over and secured into place, before, during or after the ribs of said first and second frames are locked into place.

6. The corrugated assembly of claim 5, wherein said first and second frames comprise tab locks defined near the periphery of said first and second frames; and edge panels comprise tab holes; wherein said tab locks and said tab holes are positioned such that tab locks are pushed through tab holes upon edge panels being secured into place, whereby said tab locks increase the holding strength of said edge panels.

7. A force resisting corrugated assembly foldably constructed from a generally flat blank, said assembly configured to be assembled into an octagonal shape.

8. The assembly of claim 7, wherein said assembly comprises:

(a) a first frame, said first frame comprising at least two jack panels; at least three ribs, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and first and second edge panels defined on first and second ends, respectively, of said first frame; and

(b) a second frame, said second frame comprising at least two jack panels; at least three ribs, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and first and second edge panels defined on first and second ends, respectively, of said second frame;

wherein said first and second frames are configured to have dimensions such that when said first and second frames are secured together, they form an octagonal shape.

8. A generally flat corrugated piece of material comprising a plurality of tab locks defined on said piece of material and configured to attach to the corrugated assembly of claim 3.

9. An attachable tray configured for attachment to the corrugated assembly of claim 3, wherein said tray is assembled from a generally flat blank and comprises a plurality of tab locks for attachment to said corrugated assembly.

10. The attachable tray of claim 9, wherein said tray is rectangular and comprises a wall on all four sides upon being assembled.

11. A force resisting corrugated assembly foldably constructed from a generally flat blank, said assembly configured to be assembled into the shape of an octagon, a hexagon, a triangle or a circle.

12. The corrugated assembly of claim 1, wherein the corrugated assembly is coated with a water-resistant coating.

13. The corrugated assembly of claim 3, wherein said corrugated assembly is further stabilized by application of securing means.

14. The corrugated assembly of claim 13, wherein said ribs of first frame and the ribs of said second frame are further secured together by application of an adhesive.

15. The corrugated assembly of claim 3, wherein the corrugated assembly is coated with a water resistant coating.

16. The corrugated assembly of claim 15, wherein said water resistant coating is a water-dispersible polymer suspension.

17. A method of constructing a force-resistance corrugated assembly comprising

(a) obtaining a first frame, said first frame comprising at least two jack panels; at least

three ribs comprising locking slots, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and first and second edge panels defined on first and second ends, respectively, of said first frame; and

(b) obtaining a second frame, said second frame comprising at least two jack panels; at least three ribs comprising locking slots, said ribs formed by folding said blank at predetermined locations and locked into place by folding lock assemblies; and first and second edge panels defined on first and second ends, respectively, of said second frame;

(c) interlocking said first and second frames by bringing together said first and second frames in a perpendicular fashion such that the ribs of the first frame lock into place with the ribs of the second frame.

18. A lock assembly to lock the orientation of an upwardly extending rib foldably constructed from a flat column of a blank, said lock assembly comprising first and second panels on either side of the flat column, and a flap extending from one of said first or second panels, wherein said flap comprises at least two wing tabs on opposing sides of said flap, wherein upon folding said first and second panels toward each other, the column folds into the upwardly extending rib, the rib having rib sides with side edges, wherein said flap folds over said first or second panel and wherein said wing tabs are raised then pressed down to secure rib into place.